



6/B

SEQUENCE LISTING

<110> Hall, Roderick L
Poll, Christopher T.
Newton, Benjamin B.
Taylor, William J.A.

<120> A Method for Accelerating the Rate of Mucociliary Clearance

<130> 98,736

<140> 09/218,913

<141> 1998-12-22

<160> 71

<170> Microsoft Word 97

<210> 1

<211> 179

<212> PRT

<213> Homo sapien

<400> 1

Ala Asp Arg Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser Lys Val
1 5 10 15

Val Gly Arg Cys Arg Ala Ser Met Pro Arg Trp Trp Tyr Asn Val Thr
20 25 30

Asp Gly Ser Cys Gln Leu Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser
35 40 45

Asn Asn Tyr Leu Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala Thr Val
50 55 60

Thr Glu Asn Ala Thr Gly Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp
65 70 75 80

Ser Ser Val Pro Ser Ala Pro Arg Arg Gln Asp Ser Glu Asp His Ser
85 90 95

Ser Asp Met Phe Asn Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr
100 105 110

Gly Pro Cys Arg Ala Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg
115 120 125

Asn Ser Cys Asn Asn Phe Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn
130 135 140

Ser Tyr Arg Ser Glu Glu Ala Cys Met Leu Arg Cys Phe Arg Gln Gln
145 150 155 160

Glu Asn Pro Pro Leu Pro Leu Gly Ser Lys Val Val Val Leu Ala Gly
165 170 175

Ala Val Ser

Sub
DL

<210> 2
 <211> 197
 <212> PRT
 <213> Homo sapien

<220>
 <221> sig_peptide
 <222> 1..18

<400> 2
 Ala Gly Ser Phe Leu Ala Trp Leu Gly Ser Leu Leu Leu Ser Gly Val
 1 5 10 15
 Leu Ala Ala Asp Arg Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser
 20 25 30
 Lys Val Val Gly Arg Cys Arg Ala Ser Met Pro Arg Trp Trp Tyr Asn
 35 40 45
 Val Thr Asp Gly Ser Cys Gln Leu Phe Val Tyr Gly Gly Cys Asp Gly
 50 55 60
 Asn Ser Asn Asn Tyr Leu Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala
 65 70 75 80
 Thr Val Thr Glu Asn Ala Thr Gly Asp Leu Ala Thr Ser Arg Asn Ala
 85 90 95
 Ala Asp Ser Ser Val Pro Ser Ala Pro Arg Arg Gln Asp Ser Glu Asp
 100 105 110
 His Ser Ser Asp Met Phe Asn Tyr Glu Glu Tyr Cys Thr Ala Asn Ala
 115 120 125
 Val Thr Gly Pro Cys Arg Ala Ser Phe Pro Arg Trp Tyr Phe Asp Val
 130 135 140
 Glu Arg Asn Ser Cys Asn Asn Phe Ile Tyr Gly Gly Cys Arg Gly Asn
 145 150 155 160
 Lys Asn Ser Tyr Arg Ser Glu Glu Ala Cys Met Leu Arg Cys Phe Arg
 165 170 175
 Gln Gln Glu Asn Pro Pro Leu Pro Leu Gly Ser Lys Val Val Val Leu
 180 185 190
 Ala Gly Ala Val Ser
 195

<210> 3
 <211> 153
 <212> PRT
 <213> Homo sapien

<400> 3
 Ile His Asp Phe Cys Leu Val Ser Lys Val Val Gly Arg Cys Arg Ala
 1 5 10 15
 Ser Met Pro Arg Trp Trp Tyr Asn Val Thr Asp Gly Ser Cys Gln Leu
 20 25 30

Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser Asn Asn Tyr Leu Thr Lys
 35 40 45
 Glu Glu Cys Leu Lys Lys Cys Ala Thr Val Thr Glu Asn Ala Thr Gly
 50 55 60
 Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp Ser Ser Val Pro Ser Ala
 65 70 75 80
 Pro Arg Arg Gln Asp Ser Glu Asp His Ser Ser Asp Met Phe Asn Tyr
 85 90 95
 Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr Gly Pro Cys Arg Ala Ser
 100 105 110
 Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg Asn Ser Cys Asn Asn Phe
 115 120 125
 Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn Ser Tyr Arg Ser Glu Glu
 130 135 140
 Ala Cys Met Leu Arg Cys Phe Arg Gln
 145 150

<210> 4
 <211> 58
 <212> PRT
 <213> Homo sapien

<400> 4
 Ile His Asp Phe Cys Leu Val Ser Lys Val Val Gly Arg Cys Arg Ala
 1 5 10 15
 Ser Met Pro Arg Trp Trp Tyr Asn Val Thr Asp Gly Ser Cys Gln Leu
 20 25 30
 Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser Asn Asn Tyr Leu Thr Lys
 35 40 45
 Glu Glu Cys Leu Lys Lys Cys Ala Thr Val
 50 55

<210> 5
 <211> 51
 <212> PRT
 <213> Homo sapien

<400> 5
 Cys Leu Val Ser Lys Val Val Gly Arg Cys Arg Ala Ser Met Pro Arg
 1 5 10 15
 Trp Trp Tyr Asn Val Thr Asp Gly Ser Cys Gln Leu Phe Val Tyr Gly
 20 25 30
 Gly Cys Asp Gly Asn Ser Asn Asn Tyr Leu Thr Lys Glu Glu Cys Leu
 35 40 45
 Lys Lys Cys
 50

<210> 6
 <211> 58
 <212> PRT
 <213> Homo sapien

<400> 6
 Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr Gly Pro Cys Arg Ala
 1 5 10 15
 Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg Asn Ser Cys Asn Asn
 20 25 30
 Phe Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn Ser Tyr Arg Ser Glu
 35 40 45
 Glu Ala Cys Met Leu Arg Cys Phe Arg Gln
 50 55

<210> 7
 <211> 51
 <212> PRT
 <213> Homo sapien

<400> 7
 Cys Thr Ala Asn Ala Val Thr Gly Pro Cys Arg Ala Ser Phe Pro Arg
 1 5 10 15
 Trp Tyr Phe Asp Val Glu Arg Asn Ser Cys Asn Asn Phe Ile Tyr Gly
 20 25 30
 Gly Cys Arg Gly Asn Lys Asn Ser Tyr Arg Ser Glu Glu Ala Cys Met
 35 40 45
 Leu Arg Cys
 50

<210> 8
 <211> 92
 <212> PRT
 <213> Homo sapien

<400> 8
 Ala Asp Arg Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser Lys Val
 1 5 10 15
 Val Gly Arg Cys Arg Ala Ser Met Pro Arg Trp Trp Tyr Asn Val Thr
 20 25 30
 Asp Gly Ser Cys Gln Leu Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser
 35 40 45
 Asn Asn Tyr Leu Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala Thr Val
 50 55 60
 Thr Glu Asn Ala Thr Gly Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp
 65 70 75 80
 Ser Ser Val Pro Ser Ala Pro Arg Arg Gln Asp Ser
 85 90

<210> 9
 <211> 708
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> 679..708
 <223> /note= "n at positions 622, 679, 707 is any nucleic acid"

<400> 9
 ggccgggtcg tttctgcct ggctgggac gctgctcctc tctgggggtcc tggcggccga 60
 ccgagaacgc agcatccacg acttctgcct ggtgtcgaag gtgggtgggca gatgccgggc 120
 ctccatgcct aggtggtggt acaatgtcac tgacggatcc tgccagctgt ttgtgtatgg 180
 gggctgtgac ggaaacagca ataattacct gaccaaggag gagtgcctca agaaatgtgc 240
 cactgtcaca gagaatgcc a cgggtgacct ggccaccagc aggaatgcag cggattcctc 300
 tgtcccaagt gctcccagaa ggcaggattc tgaagaccac tccagcgata tgttcaacta 360
 tgaagaatac tgcaccgcc a cgcagtcac tgggccttgc cgtgcatcct tcccacgctg 420
 gtactttgac gtggagagga actcctgcaa taacttcac tatggaggct gccggggcaa 480
 taagaacagc taccgctctg aggaggcctg catgctccgc tgcttccgcc agcaggagaa 540
 tctcccctg ccccttggt caaagggtgt ggttctggcc ggggctgttt cgtgatggtg 600
 ttgatccttt tctggggag cntccatggt cttactgatt ccgggtggca aggaggaacc 660
 aggagcgtgc cctgcgganc gtctggagct tccgagatga caagggnt 708

<210> 10
 <211> 235
 <212> PRT
 <213> Homo sapien

<220>
 <221> peptide
 <222> 1..235
 <223> /note= "Xaa at positions 201, 226, and 233 are nonsense or stop codons"

<400> 10
 Ala Gly Ser Phe Leu Ala Trp Leu Gly Ser Leu Leu Leu Ser Gly Val
 1 5 10 15
 Leu Ala Ala Asp Arg Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser
 20 25 30
 Lys Val Val Gly Arg Cys Arg Ala Ser Met Pro Arg Trp Trp Tyr Asn
 35 40 45
 Val Thr Asp Gly Ser Cys Gln Leu Phe Val Tyr Gly Gly Cys Asp Gly
 50 55 60
 Asn Ser Asn Asn Tyr Leu Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala

Ser Ser Val Pro Ser Ala Pro Arg Arg Gln Asp Ser Glu Asp His Ser
 85 90 95
 Ser Asp Met Phe Asn Tyr Xaa Glu Tyr Cys Thr Ala Asn Ala Val Xaa
 100 105 110
 Gly Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Trp Tyr Phe Asp Val Glu Arg
 115 120 125
 Asn Ser Cys Asn Asn Phe Xaa Tyr Xaa Gly Cys Xaa Xaa Xaa Lys Asn
 130 135 140
 Ser Tyr Xaa Ser Glu Glu Ala Cys Met Leu Arg Cys Phe Arg Xaa Gln
 145 150 155 160
 Glu Asn Pro Pro Leu Pro Leu Gly Ser Lys Val Val Val Leu Ala Gly
 165 170 175

Ala Val Ser

<210> 12
 <211> 393
 <212> DNA
 <213> Homo sapien

 <220>
 <221> misc_feature
 <222> 390..391
 <223> /note= "residue 361 is any nucleic acid"

 <220>
 <221> misc_feature
 <222> 390..391
 <223> /note= "residue 367 is any nucleic acid"

 <220>
 <221> misc_feature
 <222> 384..385
 <223> /note= "residue 384 is any nucleic acid"

 <220>
 <221> misc_feature
 <222> 367..368
 <223> /note= "residue 390 is any nucleic acid"

<400> 12
 ggccgggtcg tttctgcct ggctgggatc gctgctctc tctggggtcc tggccggccg 60
 accgagaacg cagcatccac gacttctgcc tgggtgtcgaa ggtggtgggc agattccggg 120
 cctccatgcc taggtggtgg tacaatgtca ctgacggatc ctgccagctg tttgtgtatg 180
 ggggctgtga cggaacacg aataattacc tgaccaagga ggagtgcctc aagaaatgtg 240
 ccaactgtcac agagaatgcc acgggtgacc tggccaccag caggaatgca gcggattcct 300
 ctgtcccaag tgctcccaga aggcaggatt cttgaagacc acttcagcga tatgtttcaa 360
 ntattgnaag aataattgca ccgncaacgn att 393

<210> 13
 <211> 130
 <212> PRT
 <213> Homo sapien

<220>
 <221> Region
 <222> 1..18
 <223> /label= signal peptide

<220>
 <221> Peptide
 <222> 111..130
 <223> /note= "Xaa at positions 111, 120, 122, 128, and 130 represents a nonsense or stop codon"

<400> 13
 Pro Gly Arg Phe Ser Pro Gly Trp Asp Arg Cys Ser Ser Leu Gly Ser
 1 5 10 15
 Trp Pro Ala Asp Arg Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser
 20 25 30
 Lys Val Val Gly Arg Glu Arg Ala Ser Met Pro Arg Trp Trp Tyr Asn
 35 40 45
 Val Thr Asp Gly Ser Cys Gln Leu Phe Val Tyr Gly Gly Cys Asp Gly
 50 55 60
 Asn Ser Asn Asn Tyr Leu Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala
 65 70 75 80
 Thr Val Thr Glu Asn Ala Thr Gly Asp Leu Ala Thr Ser Arg Asn Ala
 85 90 95
 Ala Asp Ser Ser Val Pro Ser Ala Pro Arg Arg Gln Asp Ser Xaa Arg
 100 105 110
 Pro Leu Gln Arg Tyr Val Ser Xaa Ile Xaa Arg Ile Ile Ala Pro Xaa
 115 120 125
 Thr Xaa
 130

<210> 14
 <211> 511
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> 425..510
 <223> /note= "n at positions 425, 482, and 510 is any nucleic acid"

<400> 14
 gcaataatta cctgaccaag gaggagtgcc tcaagaaatg tgccactgtc acagagaatg 60
 ccacgggtga cctggccacc agcaggaatg cagcggattc ctctgtccca agtgctccca 120
 gaaggcagga ttctgaagac cactccagcg atatgttcaa ctatgaagaa tactgcaccg 180


```

ccaacgcagt cactgggcct tgccgtgcat ccttcccacg ctggtacttt gacgtggaga 240
ggaactcctg caataacttc atctatggag gctgccgggg caataagaac agctaccgct 300
ctgaggaggc ctgcatgctc cgctgcttcc gccagcagga gaatcctccc ctgcccttg 360
gctcaaaggt ggtggttctg gccggggctg tttcgtgatg gtgttgatcc ttttctggg 420
gagcntccat ggtcttactg attccgggtg gcaaggagga accaggagcg tgcctgcgg 480
ancgtctgga gcttcggaga tgacaagggn t 511

```

<210> 15

<211> 169

<212> PRT

<213> Homo sapien

<220>

<221> peptide

<222> 1..169

<223> /note= "Xaa at positions 2, 23, 132, 160, and 167 represent a nonsense or stop codon"

<400> 15

```

Gln Xaa Leu Pro Asp Gln Gly Gly Val Pro Gln Glu Met Cys His Cys
1           5           10           15

```

```

His Arg Glu Cys His Gly Xaa Pro Gly His Gln Gln Glu Cys Ser Gly
          20           25           30

```

```

Phe Leu Cys Pro Lys Ser Pro Arg Arg Gln Asp Ser Glu Asp His Ser
          35           40           45

```

```

Ser Asp Met Phe Asn Tyr Glu Tyr Cys Thr Ala Asn Ala Val Thr
          50           55           60

```

```

Gly Pro Cys Arg Ala Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg
65           70           75           80

```

```

Asn Ser Cys Asn Asn Phe Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn
          85           90           95

```

```

Ser Tyr Arg Ser Glu Glu Ala Cys Met Leu Arg Cys Phe Arg Gln Gln
          100          105          110

```

```

Glu Asn Pro Pro Leu Pro Leu Gly Ser Lys Val Val Val Leu Ala Gly
          115          120          125

```

```

Ala Val Ser Xaa Trp Cys Xaa Ser Phe Ser Trp Gly Ala Ser Met Val
          130          135          140

```

```

Leu Leu Ile Pro Gly Gly Lys Glu Glu Pro Gly Ala Cys Pro Ala Xaa
          145          150          155          160

```

```

Arg Leu Glu Leu Arg Arg Xaa Gln Gly
          165

```

<210> 16

<211> 428

<212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> 1..430
 <223> /note= "n at positions 3, 11, 12, 17, 51 and 429 represent any nucleic acid"

<400> 16
 gcngcgcgtt nntcgcntgc tgggatcgct gctgcacctc tctggggctcg nggcggccga 60
 ccgagaacgc agcatccacg acttctgcct ggtgtcgaag gtggtgggca gatgccgggc 120
 ctccatgcct aggtgggtgt acaatgtcac tgacggatcc tgccagctgt ttgtgtatgg 180
 gggctgtgac ggaaacagca ataattacct gaccaaggag gagtgcctca agaaatgtgc 240
 cactgtcaca gagaatgccg cgggtgacct ggccaccagc aggaatgcag cggattcctc 300
 tgtcccaagt gctcccagaa ggcaggattc ttgaagacca cttcagcgat atgttcaact 360
 atgaagaata ctggcaccgc caacgcattc actgggcctg cgtgcatcct tcccacgctg 420
 gtactttgnc g 431

<210> 17
 <211> 424
 <212> DNA
 <213> Homo sapien

<220>
 <221> misc_feature
 <222> 1..424
 <223> /note= "n at positions 6, 310 and 408 represent any nucleic acid"

<400> 17
 tgggantcgc tgctcctctc tggggctcctg gcggccgacc gagaacgcag catccacgac 60
 ttctgcctgg tgctcgaagg ggtgggcaga tgccgggcct ccatgcctag gtggtggtac 120
 aatgtcactg acggatcctg ccagctgttt gtgtatgggg gctgtgacgg aaacagcaat 180
 aattacctga ccaaggagga gtgcctcaag aaatgtgccg ctgtcacaga gaatgccacg 240
 ggtgacctgg ccaccagcag gaatgcagcg gattcctctg tcccaagtgc tcccagaagg 300
 caggattctn gaagaccact ccagcgatat gttcaactat gaagaatact gcaccgccaa 360
 cgcagtcact gggccttgcg tggaatcctt tcccacgctg gnaatttnga cgttgagaag 420
 gaac 424

<210> 18
 <211> 57
 <212> PRT
 <213> Unknown

<220>
 <221>

<222>
 <223> /note= "Tissue factor pathway inhibitor precursor 1"

 <400> 18
 His Ser Phe Cys Ala Phe Lys Ala Asp Asp Gly Pro Cys Lys Ala Ile
 1 5 10 15

 Met Lys Arg Phe Phe Phe Asn Ile Phe Thr Arg Gln Cys Glu Glu Phe
 20 25 30

 Ile Tyr Gly Gly Cys Glu Gly Asn Gln Asn Arg Phe Glu Ser Leu Glu
 35 40 45

 Glu Cys Lys Lys Met Cys Thr Arg Asp
 50 55

 <210> 19
 <211> 57
 <212> PRT
 <213> Unknown

 <220>
 <223> /note= "Tissue factor pathway inhibitor precursor 1"

 <400> 19
 Pro Asp Phe Cys Phe Leu Glu Glu Asp Pro Gly Ile Cys Arg Gly Tyr
 1 5 10 15

 Ile Thr Arg Tyr Phe Tyr Asn Asn Gln Thr Lys Gln Cys Glu Arg Phe
 20 25 30

 Lys Tyr Gly Gly Cys Leu Gly Asn Met Asn Asn Phe Glu Thr Leu Glu
 35 40 45

 Glu Cys Lys Asn Ile Cys Glu Asp Gly
 50 55

 <210> 20
 <211> 57
 <212> PRT
 <213> Unknown

 <220>
 <223> /note= "Tissue factor pathway inhibitor precursor"

 <400> 20
 Pro Ser Trp Cys Leu Thr Pro Ala Asp Arg Gly Leu Cys Arg Ala Asn
 1 5 10 15

 Glu Asn Arg Phe Tyr Tyr Asn Ser Val Ile Gly Lys Cys Arg Pro Phe
 20 25 30

 Lys Tyr Ser Gly Cys Gly Gly Asn Glu Asn Asn Phe Thr Ser Lys Gln
 35 40 45

 Glu Cys Leu Arg Ala Cys Lys Lys Gly
 50 55

 <210> 21
 <211> 57

<212> PRT
<213> Unknown

<220>
<223> /note= "Tissue factor pathway inhibitor precursor 2"

<400> 21
Ala Glu Ile Cys Leu Leu Pro Leu Asp Tyr Gly Pro Cys Arg Ala Leu
1 5 10 15
Leu Leu Arg Tyr Tyr Tyr Arg Tyr Arg Thr Gln Ser Cys Arg Gln Phe
20 25 30
Leu Tyr Gly Gly Cys Glu Gly Asn Ala Asn Asn Phe Tyr Thr Trp Glu
35 40 45
Ala Cys Asp Asp Ala Cys Trp Arg Ile
50 55

<210> 22
<211> 57
<212> PRT
<213> Unknown

<220>
<223> /note= "Tissue factor pathway inhibitor precursor 2"

<400> 22
Pro Ser Phe Cys Tyr Ser Pro Lys Asp Glu Gly Leu Cys Ser Ala Asn
1 5 10 15
Val Thr Arg Tyr Tyr Phe Asn Pro Arg Tyr Arg Thr Cys Asp Ala Phe
20 25 30
Thr Tyr Thr Gly Cys Gly Asn Asn Asp Asn Asn Phe Val Ser Arg Glu
35 40 45
Asp Ser Lys Arg Ala Cys Ala Lys Ala
50 55

<210> 23
<211> 57
<212> PRT
<213> Unknown

<220>
<223> /note= "Amyloid Precursor Protein homologue"

<400> 23
Lys Ala Val Cys Ser Gln Glu Ala Met Thr Gly Pro Cys Arg Ala Val
1 5 10 15
Met Pro Arg Thr Thr Phe Asp Leu Ser Lys Gly Lys Cys Val Arg Phe
20 25 30
Ile Thr Gly Gly Cys Gly Gly Asn Arg Asn Asn Phe Glu Ser Glu Asp
35 40 45
Tyr Cys Met Ala Val Cys Lys Ala Met
50 55

<210> 24
<211> 58
<212> PRT
<213> Unknown

<220>
<223> /note= "Aprotinin"

<400> 24
Arg Pro Asp Phe Cys Leu Glu Pro Pro Tyr Thr Gly Pro Cys Lys Ala
1 5 10 15
Arg Ile Ile Arg Tyr Phe Tyr Asn Ala Lys Ala Gly Leu Cys Gln Thr
20 25 30
Phe Val Tyr Gly Gly Cys Arg Ala Lys Arg Asn Asn Phe Lys Ser Ala
35 40 45
Glu Asp Cys Met Arg Thr Cys Gly Gly Ala
50 55

<210> 25
<211> 51
<212> PRT
<213> Unknown

<220>
<223> /note= "Inter alpha-trypsin inhibitor precursor"

<400> 25
Cys Gln Leu Gly Tyr Ser Ala Gly Pro Cys Met Gly Met Thr Ser Arg
1 5 10 15
Tyr Phe Tyr Asn Gly Thr Ser Met Ala Cys Glu Thr Phe Gln Tyr Gly
20 25 30
Gly Cys Met Gly Asn Gly Asn Asn Phe Val Thr Glu Lys Glu Cys Leu
35 40 45
Gln Thr Cys
50

<210> 26
<211> 57
<212> PRT
<213> Unknown

<220>
<223> /note= "Inter alpha-trypsin inhibitor precursor"

<400> 26
Val Ala Ala Cys Asn Leu Pro Ile Val Arg Gly Pro Cys Arg Ala Phe
1 5 10 15
Ile Gln Leu Trp Ala Phe Asp Ala Val Lys Gly Lys Cys Val Leu Phe
20 25 30
Pro Tyr Gly Gly Cys Gln Gly Asn Gly Asn Lys Phe Tyr Ser Glu Lys
35 40 45

Glu Cys Arg Glu Tyr Cys Gly Val Pro
50 55

<210> 27
<211> 57
<212> PRT
<213> Unknown

<220>
<223> /note= "Amyloid precursor protein"

<400> 27
Glu Val Cys Cys Ser Glu Gln Ala Glu Thr Gly Pro Cys Arg Ala Met
1 5 10 15

Ile Ser Arg Trp Tyr Phe Asp Val Thr Glu Gly Lys Cys Ala Pro Phe
20 25 30

Phe Tyr Gly Gly Cys Gly Gly Asn Arg Asn Asn Phe Asp Thr Glu Glu
35 40 45

Tyr Cys Met Ala Val Cys Gly Ser Ala
50 55

<210> 28
<211> 51
<212> PRT
<213> Unknown

<220>
<223> /note= "Collagen alpha-3 (VI) precursor"

<400> 28
Cys Lys Leu Pro Lys Asp Glu Gly Thr Cys Arg Asp Phe Ile Leu Lys
1 5 10 15

Trp Tyr Tyr Asp Pro Asn Thr Lys Ser Cys Ala Arg Phe Trp Tyr Gly
20 25 30

Gly Cys Gly Gly Asn Glu Asn Lys Phe Gly Ser Gln Lys Glu Cys Glu
35 40 45

Lys Val Cys
50

<210> 29
<211> 57
<212> PRT
<213> Unknown

<220>
<223> /note= "HKI-B9"

<400> 29
Pro Asn Val Cys Ala Phe Pro Met Glu Lys Gly Pro Cys Gln Thr Tyr
1 5 10 15

Met Thr Arg Trp Phe Phe Asn Phe Glu Thr Gly Glu Cys Glu Leu Phe
20 25 30

Ala Tyr Gly Gly Cys Gly Gly Asn Ser Asn Asn Phe Leu Arg Lys Glu
 35 40 45

Lys Cys Glu Lys Phe Cys Lys Phe Thr
 50 55

<210> 30

<211> 46

<212> DNA

<213> S. cerevisiae

<400> 30

gccaaagcttg gataaaagat atgaagaata ctgcaccgcc aacgca 46

<210> 31

<211> 35

<212> DNA

<213> S. cerevisiae

<400> 31

ggggatcctc actgctggcg gaagcagcgg agcat 35

<210> 32

<211> 206

<212> DNA

<213> Homo sapien

<220>

<223> /note= "cDNA of human Bikunin protein fragment"

<400> 32

ccaagcttgg ataaaagata tgaagaatac tgcaccgccca acgcagtcac tgggccttgc 60

cgtgcatacct tcccacgctg gtactttgac gtggagagga actcctgcaa taacttcac 120

tatggaggct gccggggcaa taagaacagc taccgctctg aggaggcctg catgctccgc 180

tgcttccgcc agcagtgagg atcccc 206

<210> 33

<211> 28

<212> DNA

<213> Homo sapien

<400> 33

cgaagcttca tctccgaagc tccagacg 28

<210> 34

<211> 31

<212> DNA

<213> Homo sapien

<400> 34

aggatctaga caataattac ctgaccaagg a 31

<210> 35

<211> 36

<212> DNA

<213> Homo sapien

<400> 35 gggtctagagg ccgggtcggt tctcgctgg ctggga	37
<210> 36 <211> 19 <212> DNA <213> Homo sapien	
<400> 36 cacctgatcg cgagacccc	19
<210> 37 <211> 19 <212> DNA <213> Homo sapien	
<400> 37 gatttaggtg acactatag	19
<210> 38 <211> 20 <212> DNA <213> Homo sapien	
<400> 38 taatacgact cactataggg	20
<210> 39 <211> 22 <212> DNA <213> Homo sapien	
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<400> 40 aatccgctgc attcctgctg gtg	23
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<400> 41 cagtcactgg gccttgccgt	20
<210> 42 <211> 105 <212> DNA <213> Homo sapien	
<400> 42 gaaggggtaa gcttgataa aagatatgaa gaatactgca ccgccaacgc agtcactggg	60

ccttgccgtg catccttccc acgctggtac tttgacgtgg agagg 105

<210> 43
 <211> 129
 <212> DNA
 <213> Homo sapien

<400> 43
 cgcggatccc tactggcgga agcagcggag catgcaggcc tcctcagagc ggtagctggt 60
 cttattgccc cggcagcctc catagatgaa gttattgcag gagttcctct ccacgtcaaa 120
 gtaccagcg 129

<210> 44
 <211> 207
 <212> DNA
 <213> Homo sapien

<400> 44
 gaaggggtaa gcttggataa aagatatgaa gaatactgca ccgccaacgc agtcactggg 60
 ccttgccgtg catccttccc acgctggtac tttgacgtgg agaggaactc ctgcaataac 120
 ttcattctatg gaggtgccg gggcaataag aacagctacc gctctgagga ggctgcatg 180
 ctccgctgct tccgccagta gggatcc 207

<210> 45
 <211> 248
 <212> PRT
 <213> Homo sapien

<220>
 <221> Region
 <222> 1..18
 <223> /label= signal peptide

<400> 45
 Met Leu Arg Ala Glu Ala Asp Gly Val Ser Arg Leu Leu Gly Ser Leu
 1 5 10 15
 Leu Leu Ser Gly Val Leu Ala Ala Asp Arg Glu Arg Ser Ile His Asp
 20 25 30
 Phe Cys Leu Val Ser Lys Val Val Gly Arg Cys Arg Ala Ser Met Pro
 35 40 45
 Arg Trp Trp Tyr Asn Val Thr Asp Gly Ser Cys Gln Leu Phe Val Tyr
 50 55 60
 Gly Gly Cys Asp Gly Asn Ser Asn Asn Tyr Leu Thr Lys Glu Glu Cys
 65 70 75 80
 Leu Lys Lys Cys Ala Thr Val Thr Glu Asn Ala Thr Gly Asp Leu Ala
 85 90 95
 Thr Ser Arg Asn Ala Ala Asp Ser Ser Val Pro Ser Ala Pro Arg Arg
 100 105 110

Gln Asp Ser Glu Asp His Ser Ser Asp Met Phe Asn Tyr Glu Glu Tyr
 115 120 125
 Cys Thr Ala Asn Ala Val Thr Gly Pro Cys Arg Ala Ser Phe Pro Arg
 130 135 140
 Trp Tyr Phe Asp Val Glu Arg Asn Ser Cys Asn Asn Phe Ile Tyr Gly
 145 150 155 160
 Gly Cys Arg Gly Asn Lys Asn Ser Tyr Arg Ser Glu Glu Ala Cys Met
 165 170 175
 Leu Arg Cys Phe Arg Gln Gln Glu Asn Pro Pro Leu Pro Leu Gly Ser
 180 185 190
 Lys Val Val Val Leu Ala Gly Leu Phe Val Met Val Leu Ile Leu Phe
 195 200 205
 Leu Gly Ala Ser Met Val Tyr Leu Ile Arg Val Ala Arg Arg Asn Gln
 210 215 220
 Glu Arg Ala Leu Arg Thr Val Trp Ser Ser Gly Asp Asp Lys Glu Gln
 225 230 235 240
 Leu Val Lys Asn Thr Tyr Val Leu
 245

<210> 46
 <211> 213
 <212> PRT
 <213> Homo sapien

<400> 46
 Ala Asp Arg Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser Lys Val
 1 5 10 15
 Val Gly Arg Cys Arg Ala Ser Met Pro Arg Trp Trp Tyr Asn Val Thr
 20 25 30
 Asp Gly Ser Cys Gln Leu Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser
 35 40 45
 Asn Asn Tyr Leu Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala Thr Val
 50 55 60
 Thr Glu Asn Ala Thr Gly Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp
 65 70 75 80
 Ser Ser Val Pro Ser Ala Pro Arg Arg Gln Asp Ser Glu Asp His Ser
 85 90 95
 Ser Asp Met Phe Asn Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr
 100 105 110
 Gly Pro Cys Arg Ala Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg
 115 120 125
 Asn Ser Cys Asn Asn Phe Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn
 130 135 140

Ser Tyr Arg Ser Glu Glu Ala Cys Met Leu Arg Cys Phe Arg Gln Gln
145 150 155 160

Glu Asn Pro Pro Leu Pro Leu Gly Ser Lys Val Val Val Leu Ala Gly
165 170 175

Leu Phe Val Met Val Leu Ile Leu Phe Leu Gly Ala Ser Met Val Tyr
180 185 190

Leu Ile Arg Val Ala Arg Arg Asn Gln Glu Arg Ala Leu Arg Thr Val
195 200 205

Trp Ser Phe Gly Asp
210

<210> 47
<211> 240
<212> PRT
<213> Homo sapien

<220>
<221> Region
<222> 1..18
<223> /label= signal peptide

<400> 47
Met Ala Gln Leu Cys Gly Leu Arg Arg Ser Arg Ala Phe Leu Ala Leu
1 5 10 15

Leu Gly Ser Leu Leu Leu Ser Gly Val Leu Ala Ala Asp Arg Glu Arg
20 25 30

Ser Ile His Asp Phe Cys Leu Val Ser Lys Val Val Gly Arg Cys Arg
35 40 45

Ala Ser Met Pro Arg Trp Trp Tyr Asn Val Thr Asp Gly Ser Cys Gln
50 55 60

Leu Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser Asn Asn Tyr Leu Thr
65 70 75 80

Lys Glu Glu Cys Leu Lys Lys Cys Ala Thr Val Thr Glu Asn Ala Thr
85 90 95

Gly Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp Ser Ser Val Pro Ser
100 105 110

Ala Pro Arg Arg Gln Asp Ser Glu Asp His Ser Ser Asp Met Phe Asn
115 120 125

Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr Gly Pro Cys Arg Ala
130 135 140

Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg Asn Ser Cys Asn Asn
145 150 155 160

Phe Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn Ser Tyr Arg Ser Glu
165 170 175

Glu Ala Cys Met Leu Arg Cys Phe Arg Gln Gln Glu Asn Pro Pro Leu

225

<210> 49

<211> 252

<212> PRT

<213> Homo sapien

<220>

<221> Region

<222> 1..18

<223> /label= signal peptide

<400> 49

Met Ala Gln Leu Cys Gly Leu Arg Arg Ser Arg Ala Phe Leu Ala Leu
1 5 10 15

Leu Gly Ser Leu Leu Leu Ser Gly Val Leu Ala Ala Asp Arg Glu Arg
20 25 30

Ser Ile His Asp Phe Cys Leu Val Ser Lys Val Val Gly Arg Cys Arg
35 40 45

Ala Ser Met Pro Arg Trp Trp Tyr Asn Val Thr Asp Gly Ser Cys Gln
50 55 60

Leu Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser Asn Asn Tyr Leu Thr
65 70 75 80

Lys Glu Glu Cys Leu Lys Lys Cys Ala Thr Val Thr Glu Asn Ala Thr
85 90 95

Gly Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp Ser Ser Val Pro Ser
100 105 110

Ala Pro Arg Arg Gln Asp Ser Glu Asp His Ser Ser Asp Met Phe Asn
115 120 125

Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr Gly Pro Cys Arg Ala
130 135 140

Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg Asn Ser Cys Asn Asn
145 150 155 160

Phe Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn Ser Tyr Arg Ser Glu
165 170 175

Glu Ala Cys Met Leu Arg Cys Phe Arg Gln Gln Glu Asn Pro Pro Leu
180 185 190

Pro Leu Gly Ser Lys Val Val Val Leu Ala Gly Leu Phe Val Met Val
195 200 205

Leu Ile Leu Phe Leu Gly Ala Ser Met Val Tyr Leu Ile Arg Val Ala
210 215 220

Arg Arg Asn Gln Glu Arg Ala Leu Arg Thr Val Trp Ser Ser Gly Asp
225 230 235 240

Asp Lys Glu Gln Leu Val Lys Asn Thr Tyr Val Leu
245 250

<210> 50
 <211> 146
 <212> PRT
 <213> Homo sapien

<220>
 <223> /note= "Human Bikunin protein fragment"

<400> 50
 Cys Leu Val Ser Lys Val Val Gly Arg Cys Arg Ala Ser Met Pro Arg
 1 5 10 15
 Trp Trp Tyr Asn Val Thr Asp Gly Ser Cys Gln Leu Phe Val Tyr Gly
 20 25 30
 Gly Cys Asp Gly Asn Ser Asn Asn Tyr Leu Thr Lys Glu Glu Cys Leu
 35 40 45
 Lys Lys Cys Ala Thr Val Thr Glu Asn Ala Thr Gly Asp Leu Ala Thr
 50 55 60
 Ser Arg Asn Ala Ala Asp Ser Ser Val Pro Ser Ala Pro Arg Arg Gln
 65 70 75 80
 Asp Ser Glu Asp His Ser Ser Asp Met Phe Asn Tyr Glu Glu Tyr Cys
 85 90 95
 Thr Ala Asn Ala Val Thr Gly Pro Cys Arg Ala Ser Phe Pro Arg Trp
 100 105 110
 Tyr Phe Asp Val Glu Arg Asn Ser Cys Asn Asn Phe Ile Tyr Gly Gly
 115 120 125
 Cys Arg Gly Asn Lys Asn Ser Tyr Arg Ser Glu Glu Ala Cys Met Leu
 130 135 140
 Arg Cys
 145

<210> 51
 <211> 170
 <212> PRT
 <213> Homo sapien

<220>
 <223> /note= "Human Bikunin protein fragment"

<400> 51
 Ala Asp Arg Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser Lys Val
 1 5 10 15
 Val Gly Arg Cys Arg Ala Ser Met Pro Arg Trp Trp Tyr Asn Val Thr
 20 25 30
 Asp Gly Ser Cys Gln Leu Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser
 35 40 45
 Asn Asn Tyr Leu Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala Thr Val
 50 55 60

Thr Glu Asn Ala Thr Gly Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp
 65 70 75 80
 Ser Ser Val Pro Ser Ala Pro Arg Arg Gln Asp Ser Glu Asp His Ser
 85 90 95
 Ser Asp Met Phe Asn Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr
 100 105 110
 Gly Pro Cys Arg Ala Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg
 115 120 125
 Asn Ser Cys Asn Asn Phe Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn
 130 135 140
 Ser Tyr Arg Ser Glu Glu Ala Cys Met Leu Arg Cys Phe Arg Gln Gln
 145 150 155 160
 Glu Asn Pro Pro Leu Pro Leu Gly Ser Lys
 165 170

<210> 52
 <211> 170
 <212> PRT
 <213> Homo sapien

<220>
 <223> /note= "Human Bikunin protein fragment"

<400> 52
 Ala Asp Arg Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser Lys Val
 1 5 10 15
 Val Gly Arg Cys Arg Ala Ser Met Pro Arg Trp Trp Tyr Asn Val Thr
 20 25 30
 Asp Gly Ser Cys Gln Leu Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser
 35 40 45
 Asn Asn Tyr Leu Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala Thr Val
 50 55 60
 Thr Glu Asn Ala Thr Gly Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp
 65 70 75 80
 Ser Ser Val Pro Ser Ala Pro Arg Arg Gln Asp Ser Glu Asp His Ser
 85 90 95
 Ser Asp Met Phe Asn Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr
 100 105 110
 Gly Pro Cys Arg Ala Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg
 115 120 125
 Asn Ser Cys Asn Asn Phe Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn
 130 135 140
 Ser Tyr Arg Ser Glu Glu Ala Cys Met Leu Arg Cys Phe Arg Gln Gln
 145 150 155 160

Glu Asn Pro Pro Leu Pro Leu Gly Ser Lys
 165 170

<210> 53
 <211> 27
 <212> PRT
 <213> Homo sapien

<220>
 <223> /note= "Signal peptide of Human Bikunin protein"

<400> 53
 Met Ala Gln Leu Cys Gly Leu Arg Arg Ser Arg Ala Phe Leu Ala Leu
 1 5 10 15

Leu Gly Ser Leu Leu Leu Ser Gly Val Leu Ala
 20 25

<210> 54
 <211> 23
 <212> DNA
 <213> Homo sapien

<220>
 <223> Human Bikunin protein fragment

<400> 54
 Met Leu Arg Ala Glu Ala Asp Gly Asn Ser Arg Leu Leu Gly Ser Leu
 1 5 10 15

Leu Leu Ser Gly Val Leu Ala
 20

<210> 55
 <211> 102
 <212> DNA
 <213> Artificial sequence

<220>
 <223> /note= "Oligomer for preparing expression construct"

<400> 55
 gaaggggtaa gcttgataa aagagaagaa tactgtactg ctaatgctgt tactggtcca 60
 tgtagagctt cttttccaag atggtacttt gatgttgaaa ga 102

<210> 56
 <211> 129
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Oligomer for preparing expression construct

<400> 56
 actggatcct cattggcgaa aacatctcaa catacaggct tcttcagatc tgtaagaatt 60
 tttattacct ctacaaccac cgtaaataaa attattacaa gaatttcttt caacatcaaa 120

gtaccatct 129

<210> 57
 <211> 108
 <212> DNA
 <213> Artificial sequence

<220>
 <223> /note= "Oligomer for preparing expression construct"

<400> 57
 gaaggggtaa gcttggataa aagaaattac gaagaatact gtactgctaa tgctgttact 60
 ggtccatgta gagcttcttt tccaagatgg tactttgatg ttgaaaga 108

<210> 58
 <211> 117
 <212> DNA
 <213> Artificial sequence

<220>
 <223> /note= "Oligomer for preparing expression construct"

<400> 58
 gaaggggtaa gcttggataa aagagatatg tttaattacg aagaatactg tactgctaata 60
 gctgttactg gtccatgtag agcttctttt ccaagatggg actttgatgt tgaaaga 117

<210> 59
 <211> 20
 <212> DNA
 <213> Homo sapiens

<400> 59
 cacctgatcg cgaagacccc 20

<210> 60
 <211> 23
 <212> DNA
 <213> Homo sapiens

<400> 60
 ctggcggaag cagcggagca tgc 23

<210> 61
 <211> 45
 <212> DNA
 <213> Artificial sequence

<220>
 <223> /note= "Oligomer for preparing Bikunin expression construct"

<400> 61
 cgcgtctcgg ctgacctggc cctgcagatg gcgcacgtgt gcggg 45

<210> 62
 <211> 60
 <212> DNA
 <213> Artificial sequence

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<220>
<223> /note= "Oligomer for preparing Bikunin construct"

<400> 62
ctgccccttg gctcaaagta ggaagatctt ccccccgggg ggggtggttct ggcggggctg      60

<210> 63
<211> 14
<212> PRT
<213> Homo sapien

<220>
<223> /note= "Human Bikunin protein fragment"

<400> 63
Leu Arg Cys Phe Arg Gln Gln Glu Asn Pro Pro Pro Leu Gly
1              5              10

<210> 64
<211> 20
<212> PRT
<213> Homo sapien

<220>
<223> /note= "Human Bikunin protein fragment"

<400> 64
Ala Asp Arg Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser Lys Val
1              5              10              15

Val Gly Arg Cys
      20

<210> 65
<211> 20
<212> PRT
<213> Homo sapien

<220>
<223> /note= "Human Bikunin protein fragment"

<400> 65
Phe Asn Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr Gly Pro Cys
1              5              10              15

Arg Ala Ser Phe
      20

<210> 66
<211> 10
<212> PRT
<213> Homo sapien

<220>
<223> /note= "Human Bikunin protein fragment"

<400> 66
Pro Tyr Val Asp Gly Ser Gln Phe Tyr Gly
1              5              10

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<210> 67
<211> 55
<212> PRT
<213> Homo sapien

<220>
<223> /note= "Human Bikunin protein fragment"

<400> 67
Val Val Val Leu Ala Gly Leu Phe Val Met Val Leu Ile Leu Phe Leu
1 5 10 15
Gly Ala Ser Met Val Tyr Leu Ile Arg Val Ala Arg Arg Asn Gln Glu
20 25 30
Arg Ala Leu Arg Thr Val Trp Ser Ser Gly Asp Asp Lys Glu Gln Leu
35 40 45
Val Lys Asn Thr Tyr Val Leu
50 55

<210> 68
<211> 43
<212> PRT
<213> Homo sapien

<220>
<223> /note= "Human Bikunin protein fragment"

<400> 68
Val Val Val Leu Ala Gly Leu Phe Val Met Val Leu Ile Leu Phe Leu
1 5 10 15
Gly Ala Ser Met Val Tyr Leu Ile Arg Val Ala Arg Arg Asn Gln Glu
20 25 30
Arg Ala Leu Arg Thr Val Trp Ser Phe Gly Asp
35 40

<210> 69
<211> 55
<212> PRT
<213> Homo sapien

<220>
<223> /note= "Human Bikunin protein fragment"

<400> 69
Val Val Val Leu Ala Gly Leu Phe Val Met Val Leu Ile Leu Phe Leu
1 5 10 15
Gly Ala Ser Met Val Tyr Leu Ile Arg Val Ala Arg Arg Asn Gln Glu
20 25 30
Arg Ala Leu Arg Thr Val Trp Ser Ser Gly Asp Asp Lys Glu Gln Leu
35 40 45
Val Lys Asn Thr Tyr Val Leu
50 55

<210> 70
 <211> 213
 <212> PRT
 <213> Homo sapien

<220>
 <223> /note= "Human Bikunin protein fragment"

<400> 70
 Ala Asp Arg Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser Lys Val
 1 5 10 15
 Val Gly Arg Cys Arg Ala Ser Met Pro Arg Trp Trp Tyr Asn Val Thr
 20 25 30
 Asp Gly Ser Cys Gln Leu Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser
 35 40 45
 Asn Asn Tyr Leu Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala Thr Val
 50 55 60
 Thr Glu Asn Ala Thr Gly Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp
 65 70 75 80
 Ser Ser Val Pro Ser Ala Pro Arg Arg Gln Asp Ser Glu Asp His Ser
 85 90 95
 Ser Asp Met Phe Asn Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr
 100 105 110
 Gly Pro Cys Arg Ala Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg
 115 120 125
 Asn Ser Cys Asn Asn Phe Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn
 130 135 140
 Ser Tyr Arg Ser Glu Glu Ala Cys Met Leu Arg Cys Phe Arg Gln Gln
 145 150 155 160
 Glu Asn Pro Pro Leu Pro Leu Gly Ser Lys Val Val Val Leu Ala Gly
 165 170 175
 Leu Phe Val Met Val Leu Ile Leu Phe Leu Gly Ala Ser Met Val Tyr
 180 185 190
 Leu Ile Arg Val Ala Arg Arg Asn Gln Glu Arg Ala Leu Arg Thr Val
 195 200 205
 Trp Ser Phe Gly Asp
 210

<210> 71
 <211> 225
 <212> PRT
 <213> Homo sapien

<220>
 <223> /note= "Human Bikunin protein fragment"

<400> 71

Ala Asp Arg Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser Lys Val
 1 5 10 15
 Val Gly Arg Cys Arg Ala Ser Met Pro Arg Trp Trp Tyr Asn Val Thr
 20 25 30
 Asp Gly Ser Cys Gln Leu Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser
 35 40 45
 Asn Asn Tyr Leu Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala Thr Val
 50 55 60
 Thr Glu Asn Ala Thr Gly Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp
 65 70 75 80
 Ser Ser Val Pro Ser Ala Pro Arg Arg Gln Asp Ser Glu Asp His Ser
 85 90 95
 Ser Asp Met Phe Asn Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr
 100 105 110
 Gly Pro Cys Arg Ala Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg
 115 120 125
 Asn Ser Cys Asn Asn Phe Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn
 130 135 140
 Ser Tyr Arg Ser Glu Glu Ala Cys Met Leu Arg Cys Phe Arg Gln Gln
 145 150 155 160
 Glu Asn Pro Pro Leu Pro Leu Gly Ser Lys Val Val Val Leu Ala Gly
 165 170 175
 Leu Phe Val Met Val Leu Ile Leu Phe Leu Gly Ala Ser Met Val Tyr
 180 185 190
 Leu Ile Arg Val Ala Arg Arg Asn Gln Glu Arg Ala Leu Arg Thr Val
 195 200 205
 Trp Ser Ser Gly Asp Asp Lys Glu Gln Leu Val Lys Asn Thr Tyr Val
 210 215 220
 Leu
 225